

Limits**Advanced****Chain Rule**

1. $\lim_{x \rightarrow \infty} e^{2-4x-8x^2}$

2. $\lim_{x \rightarrow \infty} \left(\frac{1}{x^x} \right)$

3. $\lim_{x \rightarrow \infty} \left(e^{-x^2} \right)$

4. $\lim_{x \rightarrow \infty} \left(2^x \right)$

5. $\lim_{x \rightarrow \infty} \left(\ln \left(\frac{1}{x} \right) \right)$

6. $\lim_{x \rightarrow \infty} \left(\ln(x+1) \right)$

7. $\lim_{x \rightarrow \infty} \left(\arctan(e^x) \right)$

8. $\lim_{x \rightarrow \frac{\pi}{2}^+} \left(e^{\tan(x)} \right)$

9. $\lim_{x \rightarrow -\infty} \left((1.001)^x \right)$

10. $\lim_{x \rightarrow \infty} \left(\frac{3}{x^x} \right)$

Answers

Limits

Advanced

Chain Rule

1. 0

2. 1

3. 0

4. ∞

5. $-\infty$

6. ∞

7. $\frac{\pi}{2}$

8. 0

9. 0

10. 1